

**REMARKS**

The following amendment amends Claims 1, 2, 3 and 6, cancels Claims 4 and 5 without prejudice, and adds new Claims 7-24. Now in the application are Claims 1-3 and 6-24 of which Claims 1, 9, 14, and 20 are independent. No new matter is added and no new issues are raised. The following comments address all stated grounds for rejection and place the presently pending claims, as identified above, in condition for allowance.

**Claim Rejections under 35 U.S.C. § 112****A. Rejection of Claim 3 under 35 U.S.C. § 112, first paragraph:**

Claim 3 stands rejected under 35 U.S.C. § 112, first paragraph as containing subject matter not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor at the time of filing the application had possession of the claimed invention. Specifically, the recited genetic algorithm feature in Claim 3 stands rejected for not being specified in the specification of the instant application. Applicant disagrees with the Examiner's assertion that genetic algorithms are not fully supported by the instant application, moreover Applicant contends that one skilled in the art would readily recognize and understand the subject matter of a genetic algorithm for such a term is well known in the art. Nevertheless, Applicant amends Claim 3 to remove the term "genetic" from the recited feature to better appreciate the breadth of Applicant's claimed invention. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Claim 3 under 35 U.S.C. § 112, first paragraph.

**B. Rejection of Claim 3 under 35 U.S.C. § 112, second paragraph:**

Claim 3 stands rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as his invention. Specifically, the Examiner in the Office Action considers the term "classical" recited in Claim 3 as a relative term which renders the claim indefinite. Applicant respectfully disagrees with the Examiner's assertion that "classical statistical methods" is indefinite because such a phrase is readily recognizable

and whose scope is readily determined by one skilled in the art for such this term is a term having a distinct meaning and scope. Nevertheless, Applicant amends Claim 3 to remove the recited term “classical” to better appreciate the breadth of Applicant’s claimed invention. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Claim 3 under 35 U.S.C. § 112, second paragraph.

#### **Claim Rejections under 35 U.S.C. § 102**

Claims 1, 2, 4 and 5 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,449,603 of Hunter (hereinafter “Hunter”). Applicant respectfully traverses this rejection and contends that Hunter does not anticipate Claims 1, 2, 4 and 5.

Claims 4 and 5 are cancelled by this amendment and therefore Applicant considers their rejection moot.

Claims 1 and 2, as amended, are directed to a method of providing Service Level Management (SLM) in a network, wherein a service associated with the network is composed of one or more network components and the service affects operation of a business operation related to the network. The method includes a step of collecting data on component parameters for the one or more network components. It is noted that each of the component parameters has a state. The method further includes steps of selecting one component parameter from the component parameters and declaring the selected component parameter a service parameter. The service parameter has a state representative of the service associated with the network. The method further includes a step of determining how the service parameter is influenced by the other component parameters to provide Service Level Management in the network.

A feature of the present invention is the ability to collect performance related parameters for various network components and apply those parameters to service related parameters often associated with a Service Level Agreement and determine from the performance related parameters a measure of a networks service health. That is, the present invention provides a method to identify services that depend on components of a network and to identify parameters of the network components by which accomplishment

of the desired services can be monitored, controlled or both. Accordingly, the present invention allows for the collection of what is often considered low level parameters across a collection of network hardware components and network software components to provide insight into a higher level concept such as the availability of a network hardware or software component, the reliability of a network hardware or software component, the usability of a network hardware or software component and other like service level concepts to indicate a service health of a network.

The Hunter reference does not anticipate Claims 1 and 2. The Hunter reference is directed to a system and method for improving the performance of learning agents such as neural networks, genetic algorithms and decision trees that derive prediction methods from a training set of data. That is, Hunter discloses a learning machine and method where a population of learning agents of different classes is trained on a data set, each agent producing a response and prediction method based on the agents input representation. Hunter fails to disclose a method of providing Service Level Management in a network that includes a step of determining how a service parameter is influenced by other component parameters to provide Service Level Management in the network.

In contrast, amended Claims 1 and 2 are directed to a method of providing Service Level Management in a network that includes a step of determining how a service parameter is influenced by other component parameters to provide Service Level Management in the network. The service is associated with the network and is composed of one or more network components. The service often affects operation of a business operation related to the network. Nowhere does Hunter disclose a method of providing Service Level Management in a network that includes a step of determining how a service parameter is influenced by other component parameters to provide Service Level Management in the network. Hunter is concerned with producing a more accurate prediction method in a learning machine system. Hunter is not concerned with determining a service health of a network using a service parameter selected from a number of component parameters for one or more network components and determining how the service parameter is influenced by the other component parameters to provide Service Level Management in a network.

Accordingly, the Hunter reference fails to anticipate amended Claims 1 and 2. Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Claims 1 and 2 under 35 U.S.C. § 102(e).

### **Claim Rejections under 35 U.S.C. § 103**

For the ease of discussion below each rejection under 35 U.S.C. § 103 is discussed separately.

#### **A. Rejection of Claim 3 under 35 U.S.C. § 103(a):**

Claim 3 stands rejected under 35 U.S.C. § 103 as being unpatentable over Hunter in view of U.S. Patent No. 6,456,619 of Sassin (hereinafter “Sassin”).

Claim 3 depends, directly or indirectly, upon Claim 1 and therefore incorporates the novel features of Claim 1.

Sassin is directed to a method and system for supporting a decision tree with placeholder capability. The Sassin reference is concerned with implementing an interactive decision tree protocol that accepts a first request from a user to establish a first bi-directional communications link. The user is connected to an interactive decision tree based expert unit which supports a decision tree. The user is presented with a series of option sets, each option within a set determining a subsequent set of options, each option set defining a node on the decision tree, and in assembly of all inter-related option sets defining the decision tree. According to Sassin, a request is received from the user to exit the decision tree and the user is assigned a decision tree node identifier based upon the node last visited by the user prior to the exit request. When the expert unit receives a subsequent request from the user to re-enter the decision tree and the user is automatically reconnected to a node in the decision tree based solely on the decision tree node identifier. The Sassin reference is cited for teaching data mining.

The Sassin reference fails to bridge the factual deficiencies of the Hunter reference. Nowhere in the Sassin reference is there a teaching or suggestion of a method of providing Service Level Management in a network that includes a step of determining how a service parameter is influenced by other component parameters to provide Service Level Management in the network.

Accordingly, Applicant contends that the Hunter reference in view of the Sassin reference fails to teach and suggest each and every feature of Claim 3.

Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Claim 3 under 35 U.S.C. § 103(a).

**B. Rejection of Claim 6 under 35 U.S.C. § 103(a):**

Claim 6 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Hunter in view of U.S. Patent No. 6,167,445 of Gai *et. al.* (hereinafter “Gai”). Applicant respectfully traverses this rejection and contends that Hunter in view of Gai fails to detract from the patentability of Claim 6.

Claim 6 depends upon Claim 1 and therefore incorporates the novel features of Claim 1.

The Gai reference is directed to a method and apparatus for defining and implementing high level quality of service policies in computer networks. Gai is concerned with translating one or more high level policies into a set of rules that can be applied by specific network devices. For example, a network administrator can first select an overall traffic template for a given network domain and may assign various applications, users or both to corresponding traffic types of the template. Gai is not concerned with a method of providing Service Level Management in a network by determining how a service parameter is influenced by other component parameters to provide the Service Level Management in the network.

The Gai reference fails to bridge the factual deficiencies of Hunter. Nowhere in the Gai reference is there a teaching or suggestion of a method of providing Service Level Management in a network by determining how a service parameter is influenced by other component parameters to provide the Service Level Management in the network.

Accordingly, Applicant contends that Hunter in view of Gai fails to teach and suggest each and every feature of Claim 6. Accordingly, Applicant respectfully requests the Examiner to reconsider and withdraw the rejection of Claim 6 under 35 U.S.C. § 103(a).

New ClaimsA. New Claims 7 and 8:

New Claims 7 and 8 are not anticipated by nor are they rendered obvious by the cited references either alone or in combination. Specifically, new Claims 7 and 8 depend directly or indirectly, upon Claim 1 and therefore incorporate the novel features of Claim 1. Specifically, new Claim 7 recites that the one or more network components is associated with a network component monitoring agent of a network management system. New Claim 8, which depends from new Claim 7, indicates that the step of determining interfaces with the network component monitoring agent to provide Service Level Management in the network. Each cited reference fails to disclose, teach, or suggest such features according to new Claims 7 and 8. Accordingly, new Claims 7 and 8 are patentably distinct from each of the cited references either alone or in combination.

B. New Claims 9-13:

New Claims 9-13 are not anticipated by nor are they rendered obvious by the cited references either alone or in combination. New Claims 9-13 are directed to a method of implementing service level management in a network having one or more network entities addressable by the network to manage a service associated with the network. Specifically, each cited reference fails to disclose, teach or suggest a method of implementing service level management in a network having one or more network entities addressable by the network to manage a service associated with the network. Accordingly, new Claims 9-13 are patentably distinct from each of the cited references either alone or in combination.

C. New Claims 14-19:

New Claims 14-19 are not anticipated by nor are they rendered obvious by the cited references either alone or in combination. New Claims 14-19 are directed to a device readable medium that parallels Claims 1-3, and 6-8, as amended. Accordingly, new Claims 14-19 are patentably distinct from each of the cited references either alone or in combination.

D. New Claims 20-24:

New Claims 20-24 are not anticipated by nor are they rendered obvious by the cited references either alone or in combination. New Claims 20-24 are directed to a device readable medium that parallels Claims 9-13. Accordingly, new Claims 20-24 are patentably distinct from each of the cited references either alone or in combination.

**CONCLUSION**

In view of the remarks set forth above, Applicants contend that Claims 1-3 and 6-24 presently pending in this application, are patentable, and in condition for allowance. If the Examiner deems there are any remaining issues, we invite the Examiner to call the undersigned at (617) 227-7400.

Respectfully submitted,  
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